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Wei Wei Jang		PATEL, JAY P		
Haynes and Boone, LLP		ART UNIT		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/025,543	Applicant(s) MIZELL ET AL.	
	Examiner Jay P. Patel	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the remarks filed 7/23/2007.
2. Claims 1-16 are pending.
3. Claims 1-16 are rejected.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Walsh et al. (US Patent 7027414 B2).
6. In regards to claim 1, Walsh shows in figure 4 a traffic classification process used by a classification logic 208 (figure 3) within a satellite terminal in a packet switched satellite network.

After receiving a data packet at step 401, at step 403, the application associated with the data packet is determined (filtering a packet of data for an application associated therewith).

Based on the application, at step 405, the packet is classified to a transport service (applying a service marking to the packet dependent on the application associated with the packet).

In regards to claim 2, classification logic 208, identifies a real time flow by unique UDP destination port numbers and the unique port numbers can be mapped to a transport service that addresses the applications specific bandwidth needs (column 9, lines 8-13).

In further regards to claim 3, figure 8 shows a diagram of queues within a satellite terminal. The queues affect mapping of transport services to packet delivery services. Queues 807-813 are listed via the ports (keys and index of ports). Entries 817 and 819 are PDS mapping and Priority/Rate (service marking associated with each key). Since the queues affect mapping of transport services to packet delivery services, Walsh also anticipates return the services marking included in the record associated with the port number.

In regards to claims 4, 5, and 10 the satellite terminal attempts to map IP packets arriving at the terminal using the ToS (Ipv4) or the "flow" (Ipv6) field according to up to 7 differential service codepoints (see column 9, lines 41-44).

7. In regards to claim 6, figure 2 is an illustration of satellite terminal 200 inclusive of common air interface 213 (an interface to at least one other network node).

Furthermore, figure 8 shows a diagram of queues within a satellite terminal. The queues affect mapping of transport services to packet delivery services. Queues 807-

813 are listed via the ports (keys and index of ports). Entries 817 and 819 are PDS mapping and Priority/Rate (service marking associated with each key). Since the queues affect mapping of transport services to packet delivery services, Walsh also anticipates return the services marking included in the record associated with the port number.

In regards to claims 8 and 9, the satellite terminal attempts to map IP packets arriving at the terminal using the ToS (Ipv4) or the "flow" (Ipv6) field according to up to 7 differential service codepoints (see column 9, lines 41-44).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walsh et al. (US Patent 7027414 B2) in view of Chaskar (US Patent 7023820 B2).

In regards to claims 7 and 11, Walsh teaches all the limitations of parent claims 1, 5 and 6. Walsh fails to teach, the node being an access router or a GPRS support node. Chaskar however teaches the above-mentioned limitation.

Figure 3 in Chaskar is an illustration of LSPs between SGSN and GGSN (access router and a GPRS support node) to provide class based service using differentiated service code points.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the traffic classification process taught by Walsh into the GGSN as taught by Chaskar. The motivation to incorporate would be to provide a technique that supports various QoS classes across the GPRS core network in a scalable and efficient way (see column 3 in Chaskar, lines 31-33).

10. In regards to claim 12, figure 8 in Walsh shows a diagram of queues within a satellite terminal. The queues affect mapping of transport services to packet delivery services (interrogating the table for the application with a query value). Queues 807-813 are listed via the ports (query value, keys and index of ports); the ports also have the type of application (e.g. queue 805, video teleconference)(key indicating an application). Entries 817 and 819 are PDS mapping and Priority/Rate (service marking associated with each key). Since the queues affect mapping of transport services to packet delivery services, Walsh also anticipates return the services marking included in the record associated with the port number.

In further regards to claim 12, Walsh shows in figure 4 traffic classification process used by a classification logic 208 (figure 3) within a satellite terminal in a packet switched satellite network.

After receiving a data packet at step 401, at step 403, the application associated with the data packet is determined (determining an application associated with a the packet).

Based on the application, at step 405, the packet is classified to a transport service (applying a service marking to the packet dependent on the application associated with the packet).

In further regards to claim 12, the satellite terminal attempts to map IP packets arriving at the terminal using the ToS (Ipv4) or the "flow" (Ipv6) field according to up to 7 differential service codepoints (writing the service marking into the field) (see column 9, lines 41-44).

In further regards to claim 12, the satellite terminal has a common air interface 213 (the node operable to transmit the packet across the telecommunications network).

In further regards to claim 12, Walsh fails to particularly teach, a base station subsystem operable to transmit data to the first service node and receive data from the first service node and a base transceiver station operable to provide radio frequency links to the mobile terminal.

Chaskar however, teaches the above-mentioned limitations in prior art figure 1 where BSS 118 (a base station subsystem operable to transmit data to the first service node and receive data from the first service node) is in communication with SGSN 112 and MS 122. It is noted that a BSS is comprised of base station controllers (BSCs) and the base transceiver stations (BTSSs) controlled by the BSC. Therefore, since the BSS 118 is in communications with MS 112 Chaskar also reads on a base transceiver station operable to provide RF links to a mobile device.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the traffic classification process taught by Walsh into

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the SGSN as taught by Chaskar. The motivation to incorporate would be to provide a technique that supports various QoS classes across the GPRS core network in a scalable and efficient way (see column 3 in Chaskar, lines 31-33).

In regards to claim 13, figure 8 in Walsh shows a diagram of queues within a satellite terminal. The queues affect mapping of transport services to packet delivery services. Queues 807-813 are listed via the ports (keys and index of ports); the ports also have the type of application.

In regards to claim 14, Walsh teaches that the satellite terminal attempts to map IP packets arriving at the terminal using the ToS (Ipv4) or the "flow" (Ipv6) field according to up to 7 differential service codepoints (see column 9, lines 41-44).

In regards to claims 15 and 16, figure 9 in Walsh shows a computer system used to carry out the traffic classification. Figure 9 includes main memory 907, ROM 909, storage device 911 (all which read on a memory bank) and a processor 905 (CPU).

In further regards to claims 15 and 16, Walsh also teaches in figure 4 a traffic classification process used by classification logic 208 (figure 3) within a satellite terminal in a packet switched satellite network. After receiving a data packet at step 401, at step 403, the application associated with the data packet is determined (which reads on a filter). Walsh also teaches identification of a real time flow by unique UDP destination port numbers and the unique port numbers can be mapped (interrogate an index) to a transport service that addresses the applications specific bandwidth needs (column 9, lines 8-13).

Response to Arguments

11. Applicant's arguments filed 7/23/2007 have been fully considered but they are not persuasive.

The applicant argues on page 5 that Walsh fails to teach "applying a service marking to the packet dependent upon the application associated with the packet." The examiner respectfully disagrees and insists that the classification carried out by logic 208 is indeed equivalent to applying a service marking. Furthermore, in figure 4 the packets are classified based upon the application associated with the received packets.

The examiner also notes that the applicant has stated in the background section page 3, lines 29-31 that the object of the invention is to provide differentiated service classifications on a per-application basis. This is also an object of Walsh's invention (refer to column 3, lines 4-7). The applicant hasn't presented the claims/remarks in a manner that further clarifies to the examiner what the differences between steps 403 and 405 carried out by the classification logic 208 from Walsh and the applicant's invention in the present application are. The applicant merely states that the examiner's reliance on the relevant aspects of figure 4 are not equivalent to the "applying a service marking....with the packet," as claimed in claim 1. However, the applicant fails to elaborate on what the differences are.

With regards to claims 6 and 12, the applicant argues that Walsh fails to teach the table comprising the index and a node to interrogate the index. The examiner however, respectfully disagrees and insists that the satellite terminal and the teaching of queues that affect mapping of transport services does anticipate the table comprising

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the index and the node. In further regards, the applicant merely states that Walsh fails to anticipate the limitations of claim 6 and fails to teach the relevant limitations of claim 12 that the examiner has relied on Walsh for. However, the applicant makes no reference to the relevant sections in Walsh to further elaborate as to why Walsh fails to teach the above-mentioned limitations.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay P. Patel whose telephone number is (571) 272-3086. The examiner can normally be reached on M-F 9:00 am - 5:00 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jpp 9/20/07
Jay P. Patel
Examiner
Art Unit 2616

EDAN D. ORGAD
SUPERVISORY PATENT EXAMINER

Edan Orgad 9/20/07